

(c) forming at least one dielectric layer over said interconnect lines, said at least one dielectric layer having a first thickness;

(d) polishing said at least one dielectric layer to form a polished surface; and

(e) forming a thin cap layer over said polished surface to planarize said polished surface, said thin cap layer having a second thickness which is substantially less than said first thickness.

56. (New) The method of claim 55 wherein said first thickness is about 20K angstroms to 30K angstroms, and said second thickness is about 1K to 3K angstroms.

57. (New) The method of claim 55, wherein said first thickness is about ten times greater than said second thickness.

58. (New) The method of claim 55, wherein said cap layer prevents metal bridges from forming in said scratches of said at least one dielectric layer.

59. (New) The method of claim 55, wherein said at least one dielectric layer includes a fluorinated silicon glass (FSG) layer.

60. (New) The method of claim 55, wherein said at least one dielectric layer further includes a high density plasma chemical vapor deposition layer formed between and over said interconnect lines.

61. (New) The method of claim 55, wherein said cap layer includes silicon oxide, silicon nitride, phosphosilicate glass (PSG), and/or silicon-rich oxide.

62. (New) The method of claim 55, wherein said conductive layer includes doped polysilicon.

63. (New) The method of claim 55, wherein said cap layer provides a higher degree of surface planarity than said planar surface, and further